

## CLAIMS

1. (currently amended) An interactive system comprising:

~~— (a) an article comprising (i) a surface having a plurality of positions and a plurality of different print elements respectively at the plurality of positions, and (ii) a plurality of substantially invisible codes respectively at the plurality of positions and associated with the plurality of positions on the surface; and~~

~~(b) a scanning apparatus comprising (i) a stylus having an optical detector and an optical emitter, (ii) a processor coupled to the optical detector and the optical emitter, (iii) a memory unit comprising code for different audio outputs corresponding to a plurality of the different print elements on a surface and code for determining the locations on the surface of the plurality of positions, the memory unit coupled to the processor, and (iv) an audio output device coupled to the processor, wherein the scanning apparatus recognizes at least one of the plurality of print elements on a surface via the code for determining locations, and provides an audio output in accordance with the one print element.~~

2. (currently amended) The interactive system of claim 1 wherein the surface ~~article~~ is a sheet of paper or a molded plastic body.

3. (original) The interactive system of claim 1 wherein the stylus further comprises a writing element.
4. (original) The interactive system of claim 1 wherein the processor, the memory unit, and the audio output device are in the stylus.
5. (original) The interactive system of claim 1 further comprising a platform and wherein the processor, the memory unit, and the audio output device are in the platform.
6. (currently amended) The interactive system of claim 1 wherein the surface ~~article~~ is a globe.
7. (currently amended) The interactive system of claim 1 wherein the ~~the~~ plurality of print elements includes ~~and~~ words and the different audio outputs comprise spelling or sounding words.
8. (currently amended) The interactive system of claim 1 wherein the surface has a plurality of positions and the plurality of print elements are respectively at the plurality of positions, and a plurality of substantially invisible codes respectively are at the plurality of positions and associated with the plurality of positions on the surface, and wherein the plurality of

codes comprise a plurality of dots that represent binary codes.

9. (original) The interactive system of claim 1 wherein the different audio outputs comprise different music outputs associated with the print elements.

10. (original) The interactive system of claim 1 wherein the different audio outputs comprise instructions for learning math.

11. (currently amended) A scanning apparatus for use with an article comprising (i) a surface having a plurality of positions and a plurality of different print elements respectively at the plurality of positions, and (ii) a plurality of substantially invisible codes respectively at the plurality of positions and associated with the plurality of positions on the surface, the scanning apparatus comprising:  
~~A scanning apparatus for use with an article comprising (i) a surface having a plurality of positions and a plurality of different print elements respectively at the plurality of positions, and (ii) a plurality of substantially invisible codes respectively at the plurality of positions and associated with the plurality of positions on the surface, the scanning apparatus comprising:~~

~~(a) a stylus comprising an optical detector and an optical emitter;~~

~~(b) a processor coupled to the optical detector and an optical emitter;~~

- (e) a memory unit comprising code for different audio outputs corresponding to the different print elements and code for correlating the locations of the plurality of positions with the audio outputs, the memory unit coupled to the processor; and
- (d) an audio output device coupled to the processor.

12. (original) The scanning apparatus of claim 11 wherein the article comprises a sticker.

13. (original) The scanning apparatus of claim 11 wherein the processor, memory unit, and the audio output device are in the stylus.

14. (original) The scanning apparatus of claim 11 wherein the different audio outputs comprise the sounds of words, the spelling of words, or music.

15. (original) The scanning apparatus of claim 11 further comprising a transceiver coupled to the processor.

16. (currently amended) The scanning apparatus of claim 11 wherein the memory unit further comprises code for ~~asking~~ rendering audible questions, code for playing games, code for recording audio provided by the user, code for user entered data, and/or code for recognizing handwriting or printed

characters.

17. (currently amended) A scanning apparatus for use with an article comprising a surface having a plurality of positions and a plurality of print elements respectively at the plurality of positions and a plurality of substantially invisible codes at the plurality of positions, wherein the codes relate to locations for the positions, wherein the substantially invisible codes are free of audio data, and wherein the scanning apparatus in the form of a stylus, the scanning apparatus comprising:

- (a) an optical detector ~~and an optical emitter~~;
- (b) a processor coupled to the optical detector;
- (c) a memory unit storing code for different audio outputs corresponding to the print elements, the memory unit coupled to the processor; and
- (d) an audio output device coupled to the processor.

18. (currently amended) A method for generating an audio output in response to scanning, the method comprising:

- (a) ~~providing an article comprising (i) a surface having a plurality of positions and a plurality of print elements respectively at the plurality of positions, and (ii) a plurality of codes respectively at the plurality of positions and relating to locations of the plurality of positions on the surface;~~
- (b) determining a first location of scanning a first code associated with a

first print element on a surface and correlating the first location with a scanning apparatus to the first print element;

(e) producing ~~receiving~~ a first audio output corresponding to the ~~scanned~~ first print element;

(d) determining a second location of scanning a second code associated with a second print element on the surface and correlating the second location to the second print element with the scanning apparatus; and

(e) producing ~~receiving~~ a second audio output corresponding to the ~~scanned~~ second print element, wherein the second audio output is different than the first audio output.

19. (original) The method of claim 18 wherein the first and second audio outputs comprise math instruction.

20. (currently amended) The method of claim 18 wherein the first and second audio outputs are produced by a scanning apparatus comprising ~~scanning apparatus comprises~~ a writing element.

21. (currently amended) The method of claim 18 wherein the first and second audio outputs are produced by a scanning apparatus comprising ~~scanning apparatus comprises~~ a speaker.

22. (currently amended) A method for scanning, the method comprising:

~~(a) — providing an article comprising (i) a surface having a plurality of positions, and (ii) a plurality of codes respectively at the plurality of positions and relating to locations of the plurality of positions on the surface;~~

~~(b) —~~ determining a location of writing a print element on a surface and correlating the location to the print element, the print element created by the article with a writing element in a scanning apparatus; and

~~generating (c) — scanning a code associated the written print element with the scanning apparatus; and~~

~~(d) — receiving an audio output corresponding to the scanned, written the~~ print element, the audio output generated by the scanning apparatus.

23. (currently amended) The method of claim 22 wherein the surface ~~article~~ is a sheet of paper.

24. (currently amended) The method of claim 22 wherein the audio output is related to ~~a user performs~~ a mathematical computation defined by the print element when performing (b) (d).

25. (currently amended) An interactive system comprising:

~~(a) — an article comprising (i) a surface having a plurality of positions, and (ii) a plurality of substantially invisible codes respectively at the plurality of~~

~~positions and associated with the plurality of positions on the surface,  
wherein the substantially invisible codes are free of audio data; and~~

(b) a scanning apparatus comprising (i) a stylus having an optical detector ~~and an optical emitter~~, (ii) a processor coupled to the optical detector ~~and the optical emitter~~, (iii) a memory unit storing code for audio outputs and code for storing ~~the locations of the~~ a plurality of positions of a surface, the memory unit coupled to the processor, and (iv) an audio output device coupled to the processor, wherein the surface has a plurality of positions and a plurality of substantially invisible codes respectively at the plurality of positions and associated with the plurality of positions on the surface, wherein the substantially invisible codes are free of audio data.

26. (currently amended) The system of claim 25 wherein the surface comprises ~~article is~~ a sheet of paper.

27. (original) The system of claim 25 wherein the processor, the memory unit, and the audio output device are in the stylus.

28. (currently amended) An interactive system comprising:

~~(a) — an article comprising (i) an object, and (ii) at least one sticker comprising a first substantially invisible code and a first print element, and a second substantially invisible code and a second print element, wherein the~~



~~at least one sticker is on the object; and~~

(b) a scanning apparatus comprising (i) a stylus having an optical detector ~~and an optical emitter~~, (ii) a processor coupled to the optical detector ~~and the optical emitter~~, (iii) a memory unit coupled to the processor, wherein the memory unit comprises code for an output dependent on the scanning of a ~~the~~ first substantially invisible code and a ~~the~~ second substantially invisible code, and (iv) an audio output device coupled to the processor, wherein the first substantially invisible code comprises at least one sticker and a first print element, and the second substantially invisible code comprises a second print element, wherein the at least one sticker is on an object.

29. (original) The interactive system of claim 28 wherein the first print element is on a first sticker and the second print element is on a second sticker.

30. (original) The interactive system of claim 28 wherein the output relates to numbers.

31. (original) The interactive system of claim 28 wherein the first and second print elements are letters.

32. (currently amended) A method comprising:

~~((a) providing an article including at least one sticker comprising a first substantially invisible code and a first print element and a second substantially invisible code and a second print element;~~

~~(b)~~ scanning a ~~the~~ first substantially invisible first code of an article including at least one sticker comprising the first substantially invisible code and a first print element and a second substantially invisible code and a second print element;

(eb) scanning the second substantially invisible code; and

(d) generating ~~listening to~~ audio relating to the first print element and the second print element.

33. (original) The method of claim 32 wherein the first and second codes are in the form of dot patterns.

34. (original) The method of claim 32 wherein the first and second print elements are letters.

35. (original) The method of claim 32 wherein the first and second print elements are on first and second stickers.

36. (original) The method of claim 32 wherein the first and second print elements are numbers.

37. (new) A computing device for providing instructional responses to a user, the computing device comprising:

a processor;

an input device; and

an output device, wherein the processor, in response to a task presented to a user, accepts unstructured input from the user on the input device and determines whether an instructional response should be output.

38. (new) The computing device of claim 37, wherein the unstructured input comprises a print element created by the user on a surface.

39. (new) The computing device of claim 37, further comprising a writing element.

40. (new) The computing device of claim 37, further comprising a stylus having an optical detector, a processor coupled to the optical detector, and a memory unit comprising code for different audio outputs corresponding the print element.

41. (new) The computing device of claim 37, wherein the output device is an audio output device.

42. (new) The computing device of claim 41, wherein the task is audibly presented to the user by the audio output device.

43. (new) The computing device of claim 41, wherein the instructional response is an audio instructional response presented to the user by the audio output device.

44. (new) The computing device of claim 41, wherein the output device is configured to generate an audio output related to a user created print element on a writing surface.

45. (new) The computing device of claim 44, wherein the writing surface has a plurality of substantially invisible codes at a plurality of positions for determining a location of a plurality of different print elements on the surface.

46. (new) The computing device of claim 41, wherein the instructional input is a non-keyboard user input.

47. (new) The computing device of claim 41, wherein the instructional response relates to the task presented to the user.

48. (new) The computing device of claim 41, further comprising a writing device and wherein the processor, input device, output device and writing device are associated with a housing having a pen-like appearance.

49. (new) In a computing device, a method for providing instructional responses to a user, comprising:

presenting a task to a user;

accepting unstructured input from the user by using an input device;

and

in response to the unstructured input, determining whether an instructional response should be output by using an output device, wherein the determination is made by a processor of the computing device.

50. (new) The method of claim 49, wherein the unstructured input comprises a print element created by the user on a surface.

51. (new) The method device of claim 49, wherein the computing device further comprises a writing element.

52. (new) The method of claim 49, wherein the computing device further comprises a stylus having an optical detector, a processor coupled to the

optical detector, and a memory unit comprising code for different audio outputs corresponding the print element.

53. (new) The method of claim 49, wherein the output device is an audio output device.

54. (new) The method of claim 53, wherein the task is audibly presented to the user by the audio output device.

55. (new) The method of claim 53, wherein the instructional response is an audio instructional response presented to the user by the audio output device.

56. (new) The method of claim 53, wherein the output device is configured to generate an audio output related to a user created print element on a writing surface.

57. (new) The method of claim 56, wherein the writing surface has a plurality of substantially invisible codes at a plurality of positions for determining a location of a plurality of different print elements on the surface.

58. (new) The method of claim 53, wherein the instructional input is a non-keyboard user input.

59. (new) The method of claim 53, wherein the instructional response relates to the task presented to the user.

60. (new) The method of claim 53, wherein the computing device is a writing device and wherein the processor, input device, output device and writing device are associated with a housing having a pen-like appearance.

61. (new) A computer readable media for implementing a method for providing instructional responses to a user, the media having computer readable code which when executed by a processor of a computing device cause the computing device to perform a method, comprising:

presenting a task to a user;

accepting unstructured input from the user by using an input device;

and

in response to the unstructured input, determining whether an instructional response should be output by using an output device, wherein the determination is made by a processor of the computing device.

62 (new) The computer readable media of claim 61, wherein the unstructured input comprises a print element created by the user on a surface.

63. (new) The computer readable media of claim 61, wherein the computing device further comprises a writing element.

64. (new) The method of claim 61, wherein the computing device further comprises a stylus having an optical detector, a processor coupled to the optical detector, and a memory unit comprising code for different audio outputs corresponding the print element.

65. (new) The computer readable media of claim 61, wherein the output device is an audio output device.

66. (new) The computer readable media of claim 65, wherein the task is audibly presented to the user by the audio output device.

67. (new) The computer readable media of claim 65, wherein the instructional response is an audio instructional response presented to the user by the audio output device.



68. (new) The computer readable media of claim 65, wherein the output device is configured to generate an audio output related to a user created print element on a writing surface.

69. (new) The computer readable media of claim 68, wherein the writing surface has a plurality of substantially invisible codes at a plurality of positions for determining a location of a plurality of different print elements on the surface.

70. (new) The computer readable media of claim 65, wherein the instructional input is a non-keyboard user input.

71. (new) The computer readable media of claim 65, wherein the instructional response relates to the task presented to the user.

72. (new) The computer readable media of claim 65, wherein the computing device is a writing device and wherein the processor, input device, output device and writing device are associated with a housing having a pen-like appearance.